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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):

Sujata Banerjee et al.

Confirmation No.: 4733

Serial No.:

10/797,200

Examiner: Hua Fan

Filed:

March 11, 2004

Group Art Unit: 4134

Atty Dockel No.: 200309497-1

Title:

RECONFIGURING A MILTICAST TREE

MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

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EXHIBIT |

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BIBLIOGRAPHIC INFO

Report Title :TITL Receiver Initiated Just-In-Timo
Adaptation for Rich Media

Distribution

Report Author(s) :AUTH Xu, Zhichen: Tang, Chunqiang: Wang, Zhiheng: Banerjee,

Report Keyword(s) :DESC streaming media; overlay

network; multicast

Number of Pages : PAGE 5
Abstract ::ABS Application-level multicast

networks overlaid over unleast IP networks are increasingly gaining in importance. While there have been several proposals for overlay multicast networks, very few of them focus on the stringent requirements of real-time applications such as streaming media. We propose an officient overlay application layer multicast infrastructure for multimedia real-time applications based on a combination of landmark clustering and RTT measurements. Our goal is to

balance the network-oriented goals of building an efficient multicast tree with the application-oriented goals of providing good QoS with minimal disruptions. Using accurate global soft state information tables, our approach promptly

EXHIBIT I (2 of 3)

high quality trees. A distinguished feature of our approach is that the tree reconfiguration is initiated just-in-time by the application client at the receiver when the media quality falls below a specific threshold. The goal is to achieve dynamic tree reconfiguration with very low switching delay such that end users do not perceive any application performance degradation. 20030310 no PS; PDF External LSND, Linux Systems & Networks Department ISSL, Internet Systems and Storage Laboratory ICPRC, Internet and Computing Platforms Research Contor

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